

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN	435	69.1

000058"85808260F-900

RTA I-----FPKQYPIINFTTAGATVQSYTNFIRAVRGRLLTGADVRHEIPV 44

BRIP AAKMAKNVDKPLFTATFNVOASSAD-YATFIAGIRNKLRNPAHFSHNRPV 49

RTA LPN-RVGLPINQRFILVELSNHAELSVTLALDVTNAYVVGVRAGNSAYFF 93

BRIP LPPVEPNVPPSRWFHVVLKASPTSAGLTLAIRADNIYLEGFKSSDGTWWE 99

RTA HPDNOEDAEAITHLFTDVONRYTFAFGGNYDRLEQLAGNLRENIELGNP 143

BRIP LTPGLIPGATYV-----GFGGTYRDLLGDTDKL-TNVALGRQQ 136

RTA LEEAISALY----YYSTGGTQPLTLARSFIICIMISEAARFQ----YIE 185

BRIP LADAVTALHGRTKADKASGPKQOQOAREAVTTLVLMVNEATRFQTVSGFVA 186

RTA GEMRTRIRYNRRSAPDPSVITLENSWGRSLTAIQESNQGFASPIQLQRR 235

BRIP GLLHPKAVEKSGKIGNEMKAQVNGWODLSAALLKTDVKPPPGKSPAKFA 236

RTA NGSKFSVDVSILIPIIALMVYRCAP-----PPSSQF 267

BRIP PIEKMGVRTAEQAANTLGILLFVEVPGLTVAKALELFHASGGK 280

FIG. 2

APPROVED	C.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN	435	69.1

003049" 8358012501560

RTA	IFPKQYPIINFTTAGATVQSYTNFIRAVRGRLLTTGADVRHEIPVLPNRVG	50
MOMOI I	D-----VNFDLSTAKTYTKFIEDFRATLPFSHKV-YDIPLLYSTIS	42
RTA	LPINQRFILVELSNHAELSVTLALDVNTNAYVVGVRAGNSAYFFHPDNQED	100
MOMOI I	--DSRRFILLDLTSYAYETISVAIDVTNVVYVAYRTRDVSYFF---KESP	87
RTA	AEAITHLFTDVQNRYTFAFGGNYDRLEQLAGNLRENIELGNGLPEEAISA	150
MOMOI I	PEAYNILFKGTR-KITLPTYGNYENLQTAHKIRENIDLGLPALSSAITT	136
RTA	LYYSTGGTQLPTLARSFIICIMISEAARFOYIEGEMRTRIRYNRRSAP	200
MOMOI I	LFYNAQSA-----PSALLVLQTTAEAAARFKYIERHVAKYVATNFK--P	179
RTA	DPSVITLENSWGRLLSTAI--QESNQAFASPIQLQRRNGSKFSVYDVS--	246
MOMOI I	NLAIISLENOWSALSQKIFLAONQGGKFRNPVDLIKPTGERFOVTNVDSD	229
RTA	ILIPIIALMVRCAPPSSQF	267
MOMOI I	VVKGNIKLLNSRASTADENFITTMTLLGESVNV	263

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

LUFFIN D-----VRFSLGSSSTYSKFIGDLRKALPSNGTVNLTILLSSAG 43

LUFFIN
---ASRYTLMTSLNYDGKAITVAVDVSQLYINGYLVNSTSYFF---NEDS 87

AKLASQYVFKGSTIVTLPYSGNYEKLQTAAGKIREKIPLGFPALDSALTT
LUFFIN 137

LUFFIN
IFHYDSTAA-----AAFLVILQTTAEASRFKYIEGQIIERI--SKNOVP 180

LUFFIN
SLATISLENSLWSLSKQIQLAQTNNGTFTKTPVVITDDKQQRVEITNVTS 230

LUFFIN KVVTKNIQLLLNYKONVA

FIG. 5

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RTA
IPIIALMV-----RCAPPPSSQF

MOMOI VTSNIQLLLNTRNIAEGDNGDVSTTHGFST 263 **FIG. 6**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

009049 888888 888888 888888

RTA IFPKQYPIINFTTAGATVQSYTNFIRAVRGLTTGADVHRHEIPVLPNRVG 50

PAPS I-----NTITFDAGNATINKYATFMESLRNEAKDPSLKCYGIPMLPNTNS 45

RTA LPINQRFILVELSNHAELSVTLALDVTNAYVVGVRAGNSA-----YFFHP 95

PAPS ---TIKYLKLOGASLKTITMLRRNLYVMGYSDPYDNKCRYHIFNDI 92

RTA DNQEDAEATHLFTDVQNRYT--FAFGNYDRLEQLAG-NLRENIELGNG 142

PAPS KGTEYSDVENTLCPSSNPRVAKPINYNGLYPTLEKKAGVTSRNEVQLGIQ 142

RTA PLEEAISALYYSTGGTQLPTLARSFICIONISEARFQYIEGEMRTRI 192

PAPS ILSSDIGKI--SGGGSFTEKIEAKFLVAIOMVSEARFKYIENQVKTN- 189

RTA RYNRRSAPDPSVITLENSWGRSLTAIOESNOGAFASPIQLORRNGSKFSV 242

PAPS -FNRDFSPNDKVLDEENWGKISTAIHNSKNGALPKPLELKNADGTKWIV 238

RTA YDVSILIPITIALMVRCAPPPSSQF 267

PAPS LRVDEIKPDVGLLNY--VNGTCQAT 261

FIG. 8

APPROVED BY DRAFTSMAN	O.G. FIG.	
	CLASS	SUBCLASS

005048888032607550

RTA	IFPKQYPIINFTTAGATVQSYTNFIRAVRGRLTTGADVRHEIPVLPNRVG	50
SAP6	V-----TSITLDLVNPTAQQYSSFVDKIRNNVKDPNLKYGGTDI--AVIG	43
RTA	LPINQRFILVELSNHAELSVTLALDVTNAYVVGYRAGNS-----AYFFHP	95
SAP6	PPSKEKFLRINFQSSRG-TVSLGLKRDNLVYVAYLAMDNTNVNRAYYFRS	92
RTA	DNQEDAEAITHLFTDVQNRYTFAFGGNYDRLEQ-----LAGNLRNIELG	140
SAP6	EITSAESTALFPEATANOKALEYTEDYQSIEKNAQITQGDQSRKELGLG	142
RTA	NGPLEEASALYYSTGGTQLPTLARSFIICIONISEAARFQYIEGEMRT	190
SAP6	IDLLSTSMEAV---NKKARVVKDEARFLLIAIONTAEEAARFRYIONLVIK	189
RTA	RIRYNRRSAPDPSVITLENSWGRSLTAI-QESNQGAFASPIQLORRNGSK	239
SAP6	N--FPNKFENSENKVIOFEVNWKKISTAIYGDAKNGVFNKDYDFGFGKVRQ	237
RTA	FSVYDVSILIPIIALMVYRCAPPPSSQF	267
SAP6	VKDLOMGLL-----MYLGKPKSSNEAN	259

FIG. 9

	60	70	80	90	100	110
pos	-	O	O	O	O	O
bind	-	O	O	O	O	O
bury	=	O	O	O	O	O
mod
hh3	x	y	a	d	s	v
hh1	x	y	a	p	f	g
hh2	x	y	t	s	r	l

FIG. 10B

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

0050408806250T550

\$H65K-1

AGT CGT CGA CAC GAT GGA CAT GAG GAC CCC TGC TCA GTT TCT TGG CAT CCT CCT ACT CTG GTT
TCC AGG TAT CAA ATG TGA CAT CCA GAT GAC TCA GT

HUH-K1

TGA CTC GCC CGG CAA GTG ATA GTG ACT CTG TCT CCC AGA CAT GCA GAC ATG GAA GAT GAG GAC
TGA GTC ATC TGG ATG TC

HUH-K2

TCA CTT GCC GGG CGA GTC AGG ACA TTA ATA GCT ATT TAA GCT GGT TCC AGC AGA AAC CAG GGA
AAT CTC CTA AGA CCC T

HUH-K3

GAT CCA CTG CCA CTG AAC CTT GAT GGG ACC CCA TCT ACC AAT CTG TTT GCA CGA TAG ATC AGG
GTC TTA GGA GAT TTC C

HUH-K4

GGT TCA GTG GCA GTG GAT CTG GGA CAG ATT ATA CTC TCA CCA GCC TGC AAT ATG AAG
ATT TTG GAA TTT ATT ATT G

HUH-K5

GTT TGA TTT CAA GCT TGG TGC CTC CAC CGA ACG TCC ACG GAG ACT CAT ACT GTT GAC AAT
AAT AAA TTC CAA AAT CTT C

HUH-G1

TGT CGA CAT CAT GGC TTG GGT GTG GAC CTT GCT ATT CCT GAT GGC AGC TGC CCA AAG TGC CCA
AGC ACA GAT CCA GTT GGT GCA G

HUH-G2

AAG GTA TAC CCA GAA GCT GCG CAG GAG ATT CTG ACG GAC CCT CCA GGC TTC TTC AGG CCA GGT
CCA GAC TGC ACC AAC TGG ATC T

FIG. 11A

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

003040" 225349 62337360

HUH-G3

GCA GCT TCT GGG TAT ACC TTC ACA AAC TAT GGA ATG AAC TGG GTG AAG CAG GCT CCA GGA AAG
GGT TTA AGG TGG ATG GGC TGG

HUH-G4

AAA GAG AAG GTA AAC CGT CCC TTG AAG TC A TCA GCA TAT GTT GGC TCT CCA GTG TGG GTG TTT
ATC CAG CCC ATC CAC CTT AAA C

HUH-G5

GAC GGT TTA CCT TCT TGG ACA CGT CTA AGT GCA CTG CCT ATT TAC AGA TCA ACA GCCTCA GAG
CCG AGG ACA CGG CTA CAT

HUH-G6

AGG AGA CGG TGA CCG TGG TCC CTT GGC CCC AGA CAT CGA AGT ACC AGT CGT AAC CCC GTC TTG
TAC AGA AAT ATG TAG CCG TGT CCT CGG C

H65G-2S

ACT AGT GTC GAC ATC ATG GCT TGG GT

H65-G2

GAG GAG ACG GTG ACC GTG GT

H65K-2S

AGT CGT CGA CAC GAT GGA CAT GAG GAC

JK1-HindIII

GTT TGA TTT CAA GCT TGG TGC

FIG. 11B

pos	60	70	80	90	100	
EU	SLESGVPSRFISGSGTE		FTLTISLQPD	FATYVCQYNSDS	KM FGQGTKV	EVK
hk1	xLxsgvpsrfsgsgtx		FTLTISLQpe	FATYVCqyxxp	xt FGqGTKv	eik
TAC	NLASGVPARFSGSGGTS		YSLTISRMEAE	DAATYCHQIRSTYP	LT FGSGTKL	ELK
bind	-+OO+O+++++--++		-+++++++	+++++O-----	-O O+++++	+++
bury	++O++-O+O-++-+O+O++		-+-+--+++-+-+--	==++==	== -+==--	+++
mod	• • • • • • • • • •		• • • • • • • • • •		• • • • •	• • • • •
M/H	M M H M	m	MH hMHm h	M MMMM	M	M
prop	NLASGVPSRFSGSGGTS		YTLTISMQAED	FATYCHQIRSTYP	LT FGQGTKL	ELK
Que	NLASGVPARFSGSGGTE		FTLTISLQPD	FATYCHQIRSTYP	LT FGQGTKV	EVK

FIG. 12A

[illegible]

FIG. 12B